

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - NSPS SOURCE - RENEWAL

PERMITTEE

ITW Signode  
Attn: Jerry Beal  
3620 West Lake Avenue  
Glenview, Illinois 60025-5811

Application No.: 73032227

I.D. No.: 031102AAE

Applicant's Designation:

Date Received: September 20, 2004

Subject: E&R/T&S Buildings

Date Issued: January 27, 2005

Expiration Date: January 27, 2010

Location: 3620-3700 West Lake Avenue, Glenview

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of five natural gas engines with catalytic converters, several fuel combustion units, cold cleaning degreasers, painting operations, extruders, mixers and ovens, an insulated drying hopper controlled by a cyclone filter and quad floor filter, a desiccant dryer system, a heater, a powder coating spray booth, a spray booth and one black zinc phosphate line pursuant to the above-referenced application. This permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e.: 100 tons/yr for NO<sub>x</sub> and CO; 25 tons/yr for VOM and combined HAPs; and 10 tons/yr for individual HAPs). As a result the source is excluded from requirements to obtain a Clean Air Act Permit Program permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permit(s) issued for this location.
2. Emissions and operation of natural gas combustion shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Natural Gas Usage</u>		<u>E M I S S I O N S</u>		<u>NO<sub>x</sub></u>		<u>CO</u>		<u>VOM</u>	
	<u>(Mft<sup>3</sup>/Mo)</u>	<u>(Mft<sup>3</sup>/Yr)</u>	<u>(Lb/Mo)</u>	<u>(T/Yr)</u>	<u>(Lb/Mo)</u>	<u>(T/Yr)</u>	<u>(Lb/Mo)</u>	<u>(T/Yr)</u>	<u>(Lb/Mo)</u>	<u>(T/Yr)</u>
5 Natural Gas Engines with Catalytic Converters	27.5	275	8,250	41.25	12,017	60.09	1,504	7.52		
All Other Natural Gas Combusted	20	200	2,000	10.0	1,680	8.4	110	0.55		

These limits are based on engine and converter manufacturer's data (NO<sub>x</sub>: 300 lb/Mft<sup>3</sup>, CO: 437 lb/Mft<sup>3</sup>, VOM: 54.7 lb/Mft<sup>3</sup>) and standard emission factors (AP-42) for other combustion. Compliance with annual limits shall be determined from a running total of 12 months of data.

- 3a. The natural gas boiler is subject to a New Source Performance Standard (NSPS) for Small Industrial, Commercial, and Industrial Steam Generating Units, 40 CFR 60, Subparts A and Dc. The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.
- b. At all times the Permittee shall maintain and operate the boiler, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions, as required by the NSPS, 40 CFR 60.11(d).
4. The Permittee shall fulfill applicable notification and recordkeeping requirements of the NSPS, 40 CFR 60.7 and 60.48c.
5. Emissions and operation of the extrusion of polypropylene and PET polyester shall not exceed the following limits:

<u>Material</u>	<u>Usage</u>		<u>Emission Factor</u> (Lb/Million Lb)	<u>VOM Emissions</u>	
	(Lb/Mo)	(Lb/Yr)		(Lb/Mo)	(Ton/Yr)
Polypropylene	2,500,000	25,000,000	200	500	2.50
PET Polyester	4,000,000	40,000,000	50	200	1.00

These limits are based on emission factors provided by raw material vendors and maximum operations. Compliance with annual limits shall be determined from a running total of 12 months of data.

- 6a. Operation of the following emission units or activities shall not exceed the following limits:
  - i. Degreasing solvent usage: 2.25 tons/month and 22.5 tons/year.
  - ii. Paint usage: 3 gallon/day and 400 gallon/year.
  - iii. Adhesives and coatings lab chemical usage: 400 lb/month and 4,000 lb/year.
  - iv. Product development oven raw material usage: 200 lb/month and 2400 lb/year.
- b. Emissions of volatile organic material (VOM) shall not exceed the following limits:
  - i. Cold cleaning degreasers: 1,200 lb/month and 6.0 tons/year
  - ii. Paint operations: 350 lb/month and 2.0 tons/year
  - iii. Adhesives & coatings lab - mixing: 200 lb/month and 1.0 tons/year

- iv. Adhesives & coating lab - ovens: 200 lb/month and 1.0 tons/year
  - v. Product development ovens: 200 lb/month and 1.2 tons/year
  - vi. Alkaline cleaning/zinc phosphate line: 0.1 lb/hr and 0.44 tons/year
- 7a. The Permittee shall maintain records of the following items, and such other items as may be appropriate to allow the Illinois EPA to review compliance with the limits in this permit.
- i. Natural gas usage for the natural gas generator engines and all other combustion ( $\text{Mft}^3/\text{month}$  and  $\text{Mft}^3/\text{year}$ ).
  - ii. Amount of degreasing solvent used and amount of solvent reclaimed (gallons/month and gallons/year).
  - iii. Amount of paint, thinner, cleaning solvent, etc., used in painting operations (gallons/month and gallons/year).
  - iv. Amount of chemicals used at the adhesives and coatings lab (pounds/month and pounds/year).
  - v. Amount of raw materials used at the product development ovens (pounds/month and pounds/year).
  - vi. Amount of polypropylene and PET polyester (each) extruded (pounds/month and pounds/year).
- b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA and USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to the Illinois EPA request for records during the course of a source inspection.
8. Within 45 days of a written request from the Illinois EPA, the emissions of the natural gas generator engines shall be stack tested by an independent testing service, during conditions which represent maximum emissions.
9. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.
10. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in

accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

11. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
9511 West Harrison  
Des Plaines, Illinois 60016

12. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year: natural gas usage, degreasing solvent usage, paint usage (including thinner, cleaning solvents). If there have been no exceedances during the prior calendar year, the Annual Emission Report shall include a statement to that effect.

If you have any questions on this, please call George Kennedy at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

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cc: Illinois EPA, FOS Region 1  
USEPA

Attachment A - EMISSIONS SUMMARY

This attachment provides a summary of the maximum emissions from this facility operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, e.g., 100 tons/year NO<sub>x</sub> and 25 tons/year for volatile organic material at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled and control measures are more effective than required in this permit.

	E M I S S I O N S					
	NO <sub>x</sub>	CO	VOM	PM	Single HAP	Combined HAPs
	<u>(Tons/Yr)</u>	<u>(Tons/Yr)</u>	<u>(Tons/Yr)</u>	<u>(Tons/Yr)</u>	<u>(Tons/Yr)</u>	<u>(Tons/Yr)</u>
<b>Natural Gas Combustion</b>						
5 Natural Gas Engines with Catalytic Converters	41.25	60.09	7.52			
All Other Natural Gas Combusted	10.00	8.40	0.55			
<b>Extrusion</b>						
Polypropylene			2.50			
PET Polyester			1.00			
<b>Degreasing Solvents, Paints, Chemicals and Other Materials</b>						
Cold Cleaning Degreasers			6.00			
Paint Operations			2.00			
Adhesives & Coating Lab Mixing			1.00			
Adhesives & Coating Lab Oven			1.00			
Product Development Ovens			1.20			
Alkaline Cleaning/Zinc Phosphate Line			0.44			
Spray Booth Negligible Emissions				0.44		
Totals	51.25	68.49	23.21	0.44	< 10	< 25

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